### Oenothera caespitosa Nutt. ssp. marginata (Nutt.) Munz tufted evening primrose Onagraceae (Evening Primrose Family)

Status: State Threatened

Rank: G5T?S1

**General Description:** Fragrant perennial herb with flowering stems ½ to 7 in. (1 to 18 cm) long; leaves long-petioled (up to 7 in. or 18 cm), weakly toothed, all basal (or occasionally alternate above); calyx lobes 2 to 3 cm long, reflexed and pink tinted at anthesis; flowers white or yellow, aging to rose color, petals clawless, stamens 8, caps woody, oblong-ovoid, angled but not winged.

Identification Tips: This entity is quite distinctive with its large (usually over 6 in. or 16 cm) pinnately lobed to coarsely dentate leaves, stiffly erect pubescence, large flowers, and symmetrical cylindrical capsules on short pedicels which are straight and villoushirsute. Additionally, *Oenothera caespitosa* ssp. *marginata* can be distinguished from *O. caespitosa* ssp. *caespitosa* by the spreading villous hairs and dentate-pinnatifid leaves characteristic of the former. Specimens of the latter are distinguished by their appressed pubescence and entire leaves.

**Phenology:** Flowering occurs from June through August. Observed pollinators of the *O. caespitosa* group are hawk moths (*Spingiadae*).

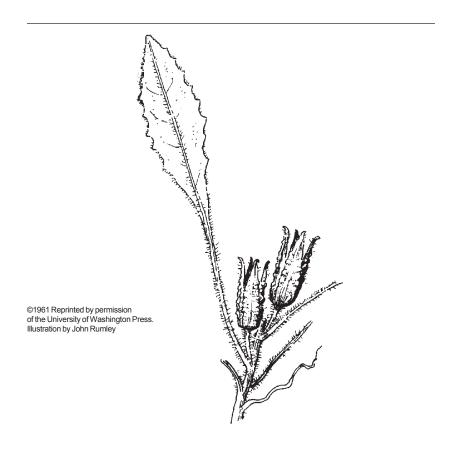
Range: Though the taxon is reported to occur throughout the western half of the United States, it was until recently thought to be possibly extirpated in Washington. Historically, *O. caespitosa* ssp. *marginata* is reported from the far southeastern portion of Washington. Recent populations have been found in Asotin and Klickitat counties.

**Habitat:** The taxon occurs on road cuts, dry hills, arid and rocky slopes in open and wooded areas, and in desert regions.

**Ecology:** The taxon has often been known to colonize road cuts and other recently disturbed sites if there is an available source of seed in contiguous areas. *Oenothera caespitosa* ssp. *marginata* is very diverse ecologically throughout its range, occurring on a variety of substrates, including limestone, volcanic cinders, sandstone, shales, and gypsum, and in a variety of vegetation types, including juniper woodlands (mainly), Arizona chaparral, conifer forests, sagebrush scrub, and grasslands.

## Oenothera caespitosa ssp. marginata

tufted evening primrose



Known distribution of Oenothera caespitosa ssp. marginata

in Washington



Current (1980+)

O Historic (older than 1980)

# Oenothera caespitosa ssp. marginata

tufted evening primrose







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## Oenothera caespitosa ssp. marginata

tufted evening primrose

**State Status Comments:** Historically this taxon is known from three occurrences in Whatcom, Whitman, and Asotin counties. It is recently known from two sightings in Asotin and Klickitat counties.

**Inventory Needs:** Additional inventory in Washington is needed.

Threats and Management Concerns: None recorded.

**Comments:** *O. caespitosa* sspp. *marginata* exhibits a very complex pattern of variation, as it is the only subspecies that intergrades with all of the other four subspecies in the *O. caespitosa* group. A considerable portion of the variation occurs within individual populations and may in part represent phenetic variability without a genetic basis. This kind of variation primarily involves size and density differences in various parts, especially of the leaves, stems, capsules, and floral tubes (Wagner, 1985).

#### References:

Hitchcock, C.L. and A. Cronquist.1973. *Flora of the Pacific Northwest.* University of Washington Press, Seattle, WA. 730 pp.

Wagner, W.L., R.E. Stockhouse and W.M. Klein. 1985. The systematics and evolution of the *Oenothera caespitosa* species complex (Onagraceae). Systematic Botany Vol. 12. Missouri Botanical Garden. Allen Press Inc., Lawrence, Kansas.

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